APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,195	04/09/2004	Yih Huang	GMU-03-023U	8608

28598 7590 05/14/2008	EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/821,195	HUANG ET AL.
	Examiner	Art Unit	
	SHEWAYE GELAGAY	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>19 February 2008</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-27</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/19/08

has been entered.

2.   Claims 1 and 16 have been amended. Claims 1-27 are pending.

Response to Arguments

1.   Applicant's arguments filed August February 19, 2008 with respect to the

rejection of the independent claims have been fully considered but they are not

persuasive. In response to applicants arguments the following comments are made:

        The applicant argued that Bommareddy monitors the operation health of

firewalls, whereas the claimed invention does not teach such monitoring. Additionally,

Bommareddy applies this type of operational health monitoring to firewalls and routers.

Applicant did not point out how the cited prior art (Bommareddy) did not teach the

claimed limitation specifically pointing out which limitations are not taught by the cited

prior art instead applicant argued that the instant application does not teach monitoring.

The applicant argued that Bommareddy's cleansing cycle involves two major

mechanisms, namely operational health monitoring and active detection of firewalls, that

are both not taught by the claimed invention self-cleansing mechanism. This is not

found persuasive. Bommareddy clearly teaches a firewall clustering systems with flow controllers supplying high availability, scalability using graceful server takedown. The flow controller allows administrator to configure a number of "hot-standby server" within the cluster mostly for high-availability. The flow controller forwards traffic to operational non-hot-standby servers. (col. 19, line 21-col. 21, line 55)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the self-cleansing intrusion tolerance system (SCIT) does not monitor the operational health of any system component", "a self-cleansing mechanism that automatically cleanses a subsystem", "self-cleansing mechanism renders operation health monitoring unnecessary", "no determination as to whether a susbsystem has been compromised by an intrusion", "even if an intrusion was successful, the intrusion would be limited to a very short window of one fast, self-cleaning cycle", "assumes that the system has been attacked or intruded ...automatically cleanses itself after a certain time period" are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant has cited different paragraph from the specification to point out how Bommareddy is different from applicant's invention but failed to specifically point out which limitations are not taught by the cited prior art. The examiner would like to point out claims are given the broadest reasonable in light of the supporting disclosure,

however, limitations appearing in the disclosure but not recited in the claim should not
be read in the claim. (see MPEP 2123)

In response to applicant's arguments, the recitation "that performs routine and
cyclical, self-cleansing activities without waiting for or detecting a system failure" has not
been given patentable weight because the recitation occurs in the preamble. A
preamble is generally not accorded any patentable weight where it merely recites the
purpose of a process or the intended use of a structure, and where the body of the
claim does not depend on the preamble for completeness but, instead, the process
steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190
USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481
(CCPA 1951).

Applicants still have failed to explicitly identify specific claim limitations, which
would define a patentable distinction over prior arts. The examiner will not interpret to
read narrowly the claim language to read exactly from the specification, but will interpret
the claim language in the broadest reasonable interpretation in view of the specification.
Therefore, the examiner asserts that cited prior art does teach or suggest the subject
matter broadly recited in independent and dependent claims.

2.   Applicant's arguments with respect to claims 11 and 25 have been considered
but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 1-10, 12-24 and 26-27 are rejected under 35 U.S.C. 102(e) as being

anticipated by Bommareddy et al. (hereinafter Bommareddy) US Patent Number

6,880,089.

As per claims 1 and 16:

        Bommareddy a self-cleansing system comprising:

        a) at least two subsystems, said at least two subsystems including an active

subsystem and at least one available inactive subsystem; (col. 15, lines 66-67)

        b) a communications link connecting said at least two subsystems; (figure 8)

        c) a local network capable of connecting said at least two subsystems to an

external network; (figure 8)

        d) an arbitration mechanism capable of designating one of said at least one

available inactive subsystem to be a designated active system; (figure 8)

        e) an IP address shared by at least said active subsystem and said designated

active subsystem, only said active subsystem utilizing said IP address to output

information to said external network; (col. 16, lines 4-13)

        f) a transfer mechanism capable of:

          i) deactivating said active subsystem, causing said active subsystem to become a deactivated subsystem; (col. 19, line 38-col. 22, line 39) and

          ii) activating said designated active subsystem, causing said designated active subsystem to become said active subsystem; (col. 19, line 38-col. 22, line 39) and

    g) a self-cleansing mechanism capable of cleansing said deactivated subsystem, causing said deactivated subsystem to become one of said at least one available inactive subsystem. (col. 19, line 38-col. 22, line 39)

As per claims 2 and 17:

    Bommareddy further teaches a system wherein said arbitration mechanism uses a criterion to select which of said at least one available inactive subsystem is to be designated said designated active subsystem. (col. 19, line 38-col. 22, line 39)

As per claim 3:

    Bommareddy further teaches a system wherein said transfer mechanism is activated by a transfer criterion. (col. 19, line 38-col. 22, line 39)

As per claim 4 and 18:

    Bommareddy further teaches a system wherein said transfer criterion is a fault detection criterion. (col. 19, line 38-col. 22, line 39)

As per claims 5 and 19:

    Bommareddy further teaches a system wherein said transfer criterion is an intrusion detection criterion. (col. 3, lines 35-37; col. 8, lines 52-60; col. 19, line 38-col. 22, line 39; col. 23, lines 61-67)

As per claim 6 and 20:

Bommareddy further teaches a system wherein said transfer criterion considers time. (col. 19, lines 1-4)

As per claim 7 and 21:

Bommareddy further teaches a system wherein at least two of said at least two subsystems are firewalls. (figure 1)

As per claim 8 and 22:

Bommareddy further teaches a system wherein at least two of said at least two subsystems are servers. (col. 3, lines 26-30)

As per claim 9 and 23:

Bommareddy further teaches a system wherein at least two of said at least two subsystems are gateways. (col. 4, lines 23-30)

As per claim 10 and 24:

Bommareddy further teaches a system further include integrity check capability. (col. 3, lines 35-37; col. 8, lines 52-60; col. 19, line 38-col. 22, line 39; col. 23, lines 61-67)

As per claim 12 and 26:

Bommareddy further teaches a system wherein said self-cleansing mechanism includes a capability to reboot at least one of said at least two subsystems. (col. 19, line 38-col. 22, line 39)

As per claim 13:

Bommareddy further teaches a system further including shared storage

accessible by at least two of said at least two subsystems. (col. 6, lines 36-41)

As per claim 14:

Bommareddy further teaches a system wherein said communications link is part

of said local network. (figure 1)

As per claim 15 and 27:

Bommareddy further teaches a system wherein said active subsystem is a

plurality of active subsystems. (col. 15, lines 66-67)

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bommareddy et al. (hereinafter Bommareddy) US Patent Number 6,880,089 in

view of Bunker, V et al. (hereinafter Bunker) US Publication Number 2003/0028803.

As per claims 11 and 25:

Bommareddy teaches all the subject matter as discussed above. Bommareddy

does not explicitly disclose a system including step of auditing said system cleansing

actions. Bunker in analogous art, however, discloses a system including step of auditing

said system cleansing actions. (page 8, paragraphs 115 and 121) Therefore it would

have been obvious to one ordinary skill in the art to modify the method disclosed by

Bommareddy with Bunker in order to have a system that facilitates an assessment

conducted by administrators. (page 8, paragraph 115; Bunker)

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SHEWAYE GELAGAY whose telephone number is

(571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 2137

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137